Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Adalimumab for treatment of hidradenitis suppurativa during the COVID-19 pandemic: Safety considerations

To the Editor: With the peak of coronavirus disease 2019 (COVID-19) expected to occur in many regions of the United States in the coming weeks to months, physicians and patients alike are concerned about the use of immunosuppressive, biologic agents given the increased infection risk. A recent Letter to the Editor highlighted the risk of total infections, upper respiratory tract infections, and nasopharyngitis in patients with psoriasis on immunomodulating biologic therapy.[1]

Similar to psoriasis, hidradenitis suppurativa (HS) is an inflammatory skin disease managed effectively with biologic agents when disease burden is high. Adalimumab, a tumor necrosis factor-α inhibitor, is currently the only United States Food and Drug Administration (FDA)-approved drug for moderate to severe HS. Compared with patients with psoriasis, patients with HS generally require higher doses of adalimumab, especially during treatment initiation.[2] Although current data are not available for COVID-19 risk in patients with HS, data from the Efficacy and Safety Study of Adalimumab in Treatment of Hidradenitis Suppurativa (PIONEER) I and II phase 3 clinical trials may provide important insight into the risk of infectious complications in this unique patient population.[3]

Table I highlights the risk of total infections, upper respiratory tract infections, and pharyngitis in patients with HS on adalimumab vs placebo from the data published in the PIONEER I and II trials.[3] In patients with HS taking adalimumab, there is a modest increased risk of total infections and nasopharyngitis by 2.5%, on average, with no difference in the risk of upper respiratory tract infections. These results demonstrate that, in general, there was minimal difference between rates of respiratory infections in patients with HS on adalimumab vs placebo.

Much like data regarding the effect of immunosuppressive drugs on patients with psoriasis, extrapolating data from the PIONEER I and II trials to susceptibility to coronavirus infection is difficult. Nonetheless, dermatologists may use these data to make informed treatment decisions for patients with HS during the ongoing COVID-19 pandemic.

Alecia Blaszczak, PhD,[a] John C. L. Trinidad, MD, MPH,[a] and Alexander M. Cartron, BS[b]

From the Division of Dermatology, The Ohio State University College of Medicine, Columbus, Ohio[a]; and the Department of Dermatology, University of Maryland School of Medicine, Baltimore, Maryland.[b]

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Not applicable.

Correspondence and reprint requests to: John C. L. Trinidad, MD, MPH, The Ohio State University College of Medicine, Division of Dermatology, 540 Officenter Pl, Ste 240, Columbus, OH 43230

E-mail: john.trinidad@osumc.edu

REFERENCES

1. Lebwohl M, Rivera-Oyola R, Murrell DF. Should biologics for psoriasis be interrupted in the era of COVID-19? *J Am Acad Dermatol*. 2020;82(5):1217-1218.
2. United States Food and Drug Administration. Adalimumab [package insert]; 2015. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2015/125057s394lbl.pdf. Accessed April 27, 2020.
3. Kimball AB, Okun MM, Williams DA, et al. Two phase 3 trials of adalimumab for hidradenitis suppurativa. *N Engl J Med*. 2016;375(5):422-434.

https://doi.org/10.1016/j.jaad.2020.04.030

Table I. Risks of total infections, upper respiratory infections, and nasopharyngitis in hidradenitis suppurativa patients taking adalimumab vs placebo*

	Patients, No.		Total infections, No. (%)		Upper respiratory tract infections, No. (%)		Nasopharyngitis, No. (%)	
Trial	Adalimumab	Placebo	Adalimumab	Placebo	Adalimumab	Placebo	Adalimumab	Placebo
PIONEER I	152	153	40 (26)	32 (21)	4 (2.6)	5 (3.3)	16 (10.5)	9 (5.9)
PIONEER II	163	163	37 (23)	36 (22)	9 (5.5)	8 (4.9)	10 (6.1)	9 (5.5)
Total	315	316	77 (24)	68 (21.5)	13 (4.1)	13 (4.1)	26 (8.2)	18 (5.7)

*Data from period 1 of the Efficacy and Safety Study of Adalimumab in Treatment of Hidradenitis Suppurativa (*PIONEER*) I and II trials.